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Volume 5

THE MONTHLY NEWSLETTER FOR ENERGY MANAGERS AND PUBLIC AFFAIRS OFFICERS

Issue 4

Message To Energy Managers:

The Shore Energy Office Policy Board is working diligently to finalize a DON Shore Energy Plan. In this issue, we feature the Board's recent meeting in China Lake.

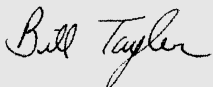
The Board was formed under SECNAV Instruction 4100 in response to new rigorous energy and pollution control goals outlined in Executive Order 13123. The formation of the Board demonstrates DON's commitment to strong stewardship of programs and solutions to make the Department of the Navy's energy program one of the most successful among all federal agencies.

Read about the Board's recent meeting as it took time to learn as well as to plan. Also review the latest on the geothermal and photovoltaic (PV) projects at China Lake.

You'll also find useful information on saving energy and increasing safety with the new energy efficient torchieres, a wise alternative to dangerous halogen torchieres.

Congratulations to NTTC Corry Station, Florida, winner of the FY 98 SECNAV Energy Award in the Large Shore Energy Category, which is applying creative solutions to energy challenges.

Sincerely,



William F. Taylor
Navy Shore Energy
Program Manager

ENERGY POLICY BOARD "Full Steam Ahead and Saving Energy"

Naval Air Weapons Station, China Lake hosted The Department of the Navy Shore Energy Policy Board's February meeting. The meeting involving high-level representatives from major Navy Claimants, the Marine Corps, CNO and SECNAV focused on finalizing the Energy Program Business Plan. Major topics also included alternative financing options, renewable energy, award programs, and energy website improvements.

The board was initially convened in July 1999 under SECNAVINST 4100 and in response to Executive Order 13123, which established new, aggressive energy reduction goals for federal agencies.

"The board is making tremendous progress in establishing a roadmap for attaining reduction goals and helping installations meet the challenges of an increasingly complex energy environment," said Captain John Bollinger, Acting Chairman of the Board.

At the conclusion of board business, members were treated to a tour of one of the Department of the Navy's premier renewable energy sources, the Coso geothermal plants, led by Dr. Frank Monastero.



Pictured, l-r: Capt. Bollinger, NAVFAC; CDR Beebe, FSA; NAWS staff; LCDR Korka, CNO; Capt. Kelm, CPF; CDR Walden, SECNAV; D. Bird, NAVSEA; Capt. Riccio, CNET; J. Remich, CNET; and Dr. Monastero, Head of Geothermal, NAWS.

Board members not pictured include: Capt. Ball, NAVAIR; Capt. Doyle, CLF; Capt. Lofaso, RESFOR; Dr. Roberts, CNO; E. Smith, NAVEUR; S. Vines, USMC.

Also attending this meeting were: V.Chun, CPF; M. Dussia, CLF; J. Heller, NFESC and B.Taylor, NAVFAC.

Revenues produced from the public/private geothermal program provide funding to the DON Energy Program. DON's Photovoltaic/Diesel Hybrid Power System, also located at China Lake, was included in the tour.

DON Energy Awareness Website: Access the tools on the Navy Energy website for ideas, planning tips, and tools. Set your browser to <http://energy.navy.mil> and scroll down the left-hand column to the Awareness pick.

ENERGY BOARD VISITS DON PV PROJECT AT CHINA LAKE

The Photovoltaic (PV)/Diesel Hybrid Power System located at the Junction Ranch Radar Cross Section Range at NAWS China Lake, CA consists of a 110-kW PV array, a 50-kW diesel generator, a 250-kW power processing unit, and a 2-MWh battery bank. The system provides power for the local buildings and test equipment, providing both a significant



cost and environmental savings by augmenting the previous prime power source, large diesel generators. The system is one of four large PV/Diesel Hybrid Power Systems located at China Lake.

HALOGEN TORCHIERES—TOO HOT TO HANDLE

Are halogen torchiere lamps, those long, slender lamps that beam a bright, white light up onto the ceiling, a common fixture in your family's house? Have they even crept into the offices on base? If they have, you need to be aware of two potential problems: risk of fire and high energy consumption.

Halogen torchiere bulbs can get as hot as 1,100° F—generating enough heat to ignite paper, cloth, wood, plastic, and other common household materials. They have caused at least 435 fires in the United States alone, killing 32, injuring more than 114 people, and causing millions of dollars in property damage. So many fires have occurred on college campuses that two-thirds of this country's colleges have banned halogen torchieres in dormitories because of safety concerns.

Safety alone should be sufficient reason to want to remove all halogen torchiere lamps from base. Another reason hits you, the Energy Manager, extremely hard: their energy and power consumption. Halogen torchiere lamps are equipped with 300- or 500-watt halogen bulbs. By one estimate, the more than 50 million halogen torchiere lamps sold in the United States have totally

wiped out our national energy savings from the use of compact fluorescents. Besides the electricity they draw directly, halogen torchieres put a tremendous burden on the air conditioning system in the cooling season.

The main selling points of halogen torchiere lamps are the bright, white light they produce, and their low purchase price, sometimes as low as \$10. However, they typically cost from \$25 to \$100 a year to operate, so they're no bargain!

Now, safe, energy-efficient alternatives that meet the demanding needs for a lamp capable of providing both a brilliant sunshine-like light and a dimmed soft, glow are gaining popularity. Energy Star 55-80 watt compact fluorescent torchiere lamps with dimming capability are on the market, selling for typically \$45 to \$100 a piece.

They can be purchased online at a number of web sites, including www.energyguide.com (Choose the Energy Gear pick) and www.lightsite.net (Go to the box in the bottom left hand corner, and click on PRODUCT CATALOG under SITE CONTENTS, then

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SECNAV ENERGY AWARD WINNERS

NTTC CORRY STATION IMPROVES BOTTOM LINE THROUGH AWARENESS

Naval Technical Training Center (NTTC) Corry Station is the winner of the FY98 Secretary of the Navy Energy Award in the Large Shore Category – receiving a monetary award of \$45,000 and the privilege of flying the SECNAV energy flag for one year.

NTTC Corry Station is saving \$100,000 and 1,450 MBTU annually through no cost/low cost energy awareness. Corry Station's weekly lighting inspection is saving \$22,460 a year. Securing lights activity-wide is saving an additional \$43,193 per year. Seasonally shutting down the air conditioning and heating systems when not needed is saving \$34,555 annually.

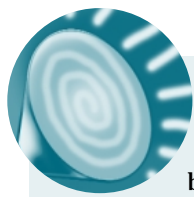
Corry Station conducted a basewide survey and analysis under a demand-side management

(DSM) Basic Ordering Agreement (BOA) with its local utility Gulf Power Company, and installed direct digital control (DDC) systems.

Corry Station worked with the Geothermal Heat Pump Consortium to explore the feasibility of installing one of the world's largest ground source heat pump installations at a military facility.

The Station continued to reap cost savings benefits by purchasing natural gas from the Defense Energy Support Center.

For more information, contact MMI (SW) Aaron Brown at 850-452-6487.



Continued from page 2

LIGHT FIXTURES, then the I AM SHOPPING FOR box—You'll find 5 different categories of torchieres from which to choose.) They will also be available soon through a number of national retail chains and through the Defense Logistics Agency.

Convince Family Housing and its residents that a change is in order—now is the time to convert from halogen to compact fluorescent torchiere lamps! Use the Lightsite web site Payback Calculator to demonstrate the cost savings that will accrue from switching to compact fluorescent torchieres. The Lightsite Home Page also displays a map showing the locations of fires caused by the halogen torchiere lamps, and graphically shows the high temperatures reached by halogen bulbs. Use this and other valuable information found on the web site as ammunition for your campaign to rid the base of halogen torchieres.

Answers to DON EARTH DAY 2000 PUZZLER





Check it Out

PVWATTS—WATTS NEW IN PV CALCULATIONS

President Clinton, through both his Million Solar Roofs Initiative and Executive Order 13123, is encouraging government agencies to install photovoltaic (PV) systems. Do you wonder if a grid-connected PV system makes sense at your facility?

Researchers at the U.S. Department of Energy's National Renewable Energy Laboratory developed a simple calculator to permit non-experts to quickly obtain 1) performance estimates for grid-connected PV systems, and 2) the value of the annual electricity these systems generate. Called PVWATTS, this simple calculator is available on the Internet at http://rredc.nrel.gov/solar/codes_algs/PVWATTS/

PVWATTS uses hourly weather data from a 239-station database and a PV performance model based on Sandia National Laboratories' PVFORM to estimate monthly and annual AC energy production (kWh) and cost savings (\$) for a crystalline silicon PV system. Currently, PVWATTS can be used for locations within the United States and its territories, which are accessible through links on a U.S. map located at the PVWATTS Internet site.

Select the station nearest your facility and plug in your cost of electricity (or go with the default setting for your state's average electricity cost). It's as simple as that.

Too simple for you? Default system parameters are used, but users can change:

- PV system size
- local electric costs
- type of PV array (fixed or tracking)
- PV array tilt angle
- PV array azimuth angle

WATTS the PV outlook at your facility?

For assistance with PV contact Chuck Combs at NAWS China 760-939-0048; chuck_combs@lmdgw.chinalake.navy.mil.

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Watts News?

We want to hear from you.

Tell us about the energy initiatives you're working on, the problems you encounter, and the solutions you discover.

Submit article ideas, comments, or questions to:

Dean Ryan Consultants & Designers, Inc.

1733 King Street, Third Floor

Alexandria, VA 22314

phone: 703-548-8115

fax: 703-548-6855

e-mail: deanryan@idsonline.com

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CORRECTION

Check out your Energy Calendar, the month of May, and you will find that the small calendars for April and June at the bottom of the page were printed incorrectly. Please turn to the June page and the April page for the correct dates.

NAVY / MARINE CORPS

ENERGY EFFICIENCY

Department of the Navy
Commanding Officer
NFESC
Code: ESC 22
1100 23rd Avenue
Port Hueneme, CA 93043-4370